

Application No.: 10/631,785
Title: RECORDING MEDIUM FOR STORING
DEFECT MANAGEMENT INFORMATION FOR
RECORDING REAL TIME DATA, DEFECT
MANAGING METHOD THEREFOR, AND REAL
TIME DATA RECORDING METHOD

ALLOWED CLAIMS

1. A recording and/or reproducing apparatus that manages defect management in a recording medium, comprising:

a pick-up to record and/or reproduce information representing replacement or nonreplacement of a defective unit of the recording medium, which occurs after initialization of the recording medium;

a controller to determine whether the defective unit will be left unreplaced by a replacement unit in a spare area of the recording medium according to the information representing replacement or non-replacement of the defective unit.

- 2. The apparatus of claim 1, wherein the information representing replacement or non-replacement of the defective unit includes positions of the defective unit and the replacement unit.
- 3. The apparatus of claim 1, wherein the information representing replacement or non-replacement of the defective unit includes positions of defective units and corresponding replacement units.
- 4. The apparatus of claim 1, wherein the information representing replacement or non-replacement indicates a plurality of defect management modes, and is recorded in a reserved area of a disc definition structure (DDS) of the recording medium.
- 5. The apparatus of claim 1, wherein the information further comprises a start sector number of the defective unit and a start sector number of the replacement unit in the SDL.
- 6. The apparatus of claim 1, wherein the recording of the information further comprises leaving only a start sector number of the defective unit in a secondary defect list (SDL), storing information representing that the defective unit has not been replaced in a Forced Re-Assignment Marking (FRM) bit of the SDL indicating whether the defective unit has been

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replaced, and storing information representing that the defective unit has not been replaced in a start sector number of the replacement unit in the SDL.

7. A recording and/or reproducing apparatus that manages defect management in a recording medium, comprising:

a pick-up to record and/or reproduce information representing replacement or nonreplacement of a defective unit of the recording medium;

a controller to determine whether the defective unit will be left unreplaced by a replacement unit in a spare area of the recording medium according to the information representing replacement or non-replacement of defective unit.

8. The apparatus of claim 8, wherein the information representing replacement and/or non-replacement of the defective unit includes positions of the defective unit and the replacement unit.

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ALLOWED CLAIMS (WITH MARK UPS)

1. A recording and/or reproducing apparatus that manages defect management in a recording medium, comprising:

a pick-up to record and/or reproduce information representing replacement or nonreplacement of a defective unit of the recording medium, which occurs after initialization of the recording medium;

a controller to determine whether the defective unit will be left unreplaced by a replacement unit in a spare area of the recording medium according to the information representing replacement or non-replacement of the defective unit.

- The apparatus of claim 1, wherein the information representing replacement or non-replacement of the defective unit includes positions of the defective unit and the replacement unit.
- 3. The apparatus of claim 1, wherein the information representing replacement or non-replacement of the defective unit includes positions of defective units and corresponding replacement units.
- 4. The apparatus of claim 1, wherein the information representing replacement or non-replacement indicates a plurality of defect management modes, and is recorded in a reserved area of a disc definition structure (DDS) of the recording medium.
- 5. The apparatus of claim 1, wherein the information further comprises a start sector number of the defective unit and a start sector number of the replacement unit in the SDL.
- 6. The apparatus of claim 1, wherein the recording of the information further comprises leaving only a start sector number of the defective unit in a secondary defect list

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(SDL), storing information representing that the defective unit has not been replaced in a Forced Re-Assignment Marking (FRM) bit of the SDL indicating whether the defective unit has been replaced, and storing information representing that the defective unit has not been replaced in a start sector number of the replacement unit in the SDL.

- 8. A recording and/or reproducing apparatus that manages defect management in a recording medium, comprising:
- a pick-up to record and/or reproduce information representing replacement or nonreplacement of a defective unit of the recording medium;
- a controller to determine whether the defective unit will be left unreplaced by a replacement unit in a spare area of the recording medium according to the information representing replacement or non-replacement of defective unit.
- 9. The apparatus of claim 8, wherein the information representing replacement and/or non-replacement of the defective unit includes positions of the defective unit and the replacement unit.